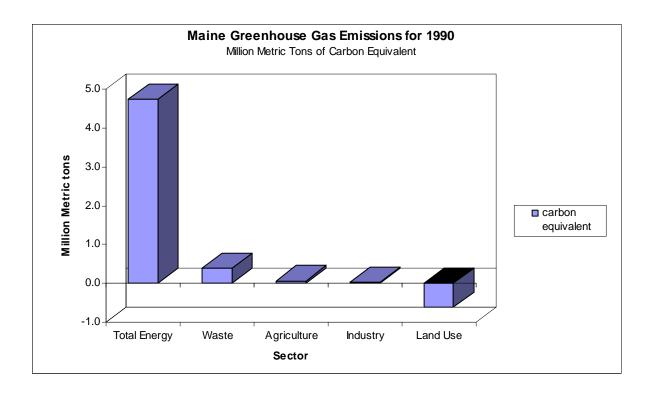
## MAINE GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



The report "Maine's Greenhouse Gas Emissions: Inventory for 1990" provides a detailed inventory of greenhouse gas emissions and sinks for Maine in 1990. Emissions were estimated using methods from EPA's 1995 guidance document **State Workbook**: **Methodologies for Estimating Greenhouse Gas Emissions**. In 1990, Maine emitted 4.6 million metric tons of carbon equivalent (MMTCE). Maine estimated emissions of 1.9 MMTCE from biomass fuels and from sources not included in the workbook. Emissions from these sources are not included in the reported total or the table below.<sup>1</sup>

The principal greenhouse gas was carbon dioxide, comprising 15.3 million metric tons (4.2 MMTCE). Other emissions included 0.1 million metric tons of methane (0.5 MMTCE) and 68 metric tons of nitrous oxide (0.01 MMTCE).

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<sup>&</sup>lt;sup>1</sup> Note that the state of the art emission inventory method has advanced since Maine completed its inventory; therefore, we have made the following adjustments to Maine's emission estimates. First, we excluded emission estimates for sources not covered by the most recent inventory guidance (<a href="http://www.epa.gov/ttnchie1/eiip/techrep.htm#green">http://www.epa.gov/ttnchie1/eiip/techrep.htm#green</a>). These emissions include methane from landfilling of sludge, carbon dioxide from blueberry field burning, and carbon dioxide and methane from other biofuels. Second, we used updated values for global warming potentials.

## Maine Greenhouse Gas Emissions for 1990

| BY SECTOR                     | CO2<br>(MMTCE) | Methane<br>(MMTCE) | Nitrous Oxide<br>(MMTCE) | HFCs, PFCs,<br>and SF6<br>(MMTCE) | Total GHG<br>Emissions<br>(MMTCE) |
|-------------------------------|----------------|--------------------|--------------------------|-----------------------------------|-----------------------------------|
| Energy - Residential          | 0.7            | *                  | *                        | *                                 | 0.7                               |
| Energy - Commercial           | 0.4            | *                  | *                        | *                                 | 0.4                               |
| Energy - Industrial           | 0.9            | *                  | *                        | *                                 | 0.9                               |
| Energy - Transport            | 2.2            | *                  | *                        | *                                 | 2.2                               |
| Energy - Utility              | 0.5            | *                  | *                        | *                                 | 0.5                               |
| Energy - Exported Electricity | *              | *                  | *                        | *                                 | *                                 |
| Energy - Other                | *              | 0.0                | 0.0                      | *                                 | 0.0                               |
| Total Energy                  | 4.7            | 0.0                | 0.0                      | *                                 | 4.7                               |
| Waste                         | *              | 0.4                | *                        | *                                 | 0.4                               |
| Agriculture                   | *              | 0.1                | 0.0                      | *                                 | 0.1                               |
| Industry                      | 0.0            | *                  | *                        | *                                 | 0.0                               |
| Land Use                      | -0.6           | *                  | *                        | *                                 | -0.6                              |
| Total                         | 4.2            | 0.5                | 0.0                      | *                                 | 4.6                               |

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk (\*) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions from biofuel combustion are excluded.

The major source of carbon dioxide emissions was fossil fuel combustion (99%), with minor emissions from cement production (<1%). Carbon dioxide sinks (i.e., an increase in forest carbon storage) offset about 12% of the total carbon dioxide emissions. Contributors to methane emissions were landfills (84%), domesticated animals (11%), manure management (2%), fossil fuel combustion (2%), and wastewater (1%). Fertilizer use (99%) and fossil fuel combustion (1%) accounted for nitrous oxide emissions.

Maine emissions in 1990 were 3.8 MTCE per capita, compared to 1990 U.S. emissions of 6.4 MTCE per capita.